

Review Number	Review Title	Review Date
PSC-2021-TYSSR-DCS-CAT	Three Year Sector Safety Review of DCS-CAT Sector 35	February 25, 2021
Scope / Agenda		Review Team
DCS-CAT	ES&H Plan Implementation Sector 35 Specific Safety Issues	John Connolly Nena Moonier Paul Rossi Mike Fries Patti Pedergrana Liz Schmidt Ken Belcher Merrick Penicka Beth Heyeck
PSC/AES	Configuration Control Records RSS Component Survey & Alignment Update RSS Interface Identification PSS User Requirements Specification Ray Traces, Operational Envelope, Design Reviews Health Physics Survey Records ES&H Inspection Records	Paulo Rigg Adam Schuman Drew Rickerson Jennifer Jones Kory Green Nick Sinclair Yuelin Li
ES&H Walk-Through	LOM 438-F office areas, laboratories Sector 35 beamlines, control areas, egress aisles	
Review Chair	ESH/QA Representative	Responsible Manager
Nena Moonier	Paul Rossi	John Connolly
Executive Summary: The DCS-CAT TYSSR was held on February 25, 2021. The group's Conduct of Operations Manual has been very useful and effective for the group.		

Section 1: TYSSR criteria are based upon APS User Safety Policies and Procedures, APS Procedure 3.1.102, Section Beamline Facilities Reviews (Formerly AP&P 3.1.18, APS document number APS_118581)

Agenda Items / Review Criteria		Discussion / Objective Evidence	Action Required
1.	Date of last TYSSR	February 22, 2018	None

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2.	Beamline management presents a summary of the ES&H program and notes changes, if any, since the last TYSSR.	Paulo Rigg presented the DCS-CAT Safety Presentation.	Presentation will be uploaded to ICMS
3.	Committee records concerns raised by Sector Personnel	None	None
4.	Committee reports outstanding action items, if any, from last TYSSR	None	None
5.	Each partner user group operating a beamline shall:	<i>See sub-items.</i>	
6.	Review beamline safety program and ES&H plan at least once every thirty-six months; revise them, as needed, and provide ES&H plan to APS User Safety Officer for approval.	The DCS-CAT Conduct of Operations has been reviewed and approved by P. Rossi and N. Moonier. The Plan is in ICMS: APS_2175934	None
7.	Review beamline safety assignments annually and reassign responsibilities or create new roles, as needed; notify USO of changes in personnel assigned to ES&H roles.	Communicated through monthly data check of the Beamline HR Admin application.	None
8.	The committee verifies that the following records are on file and consistent with the beamline:	<i>See sub-items.</i>	
9.	Review/approval records for modifications to beamline safety systems since last TYSSR	There have been no modifications to the beamline since the previous TYSSR.	None
10.	Configuration control list	Current as of the beginning of the last run.	None

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11.	Administrative Restrictions	<p>Restriction # 1 for 35-ID-C</p> <p>Reason for Restriction: Horizontal focusing mirror in 35-ID-C has been aligned to prevent pink beam from being reflected beyond the pink beam stop (35-ID-C-P-02).</p> <p>Component or Condition being Restricted: To ensure the alignment of the mirror is maintained, the mirror tank has been placed under configuration control (35-ID-C-X-07). This includes the (3) mirror tank jacks (35-ID-C-X-08), the (2) mirror tank inboard hard stops (35-ID-C-X-09), and the (4) mirror tank clamps (35-ID-C-X-10).</p> <p>Resolution Required: Floor Coordinator will conduct an annual inspection of the downstream wall of 35-ID-C to verify there are no indications of beam strikes outside of the pink beam stop.</p> <p>References: ICMS Content ID APS_1706427</p> <p>Issued by: Wendy VanWingeren on 03/16/2017 Reviewed by: Dean Wyncott on 01/23/2020</p> <p>Restriction # 2 (35-ID-D,E)</p> <p>Reason for Restriction: Type C surveys are needed when continuous white beam is transported into the D and E stations. See blue sheets in beamline end cabinet for survey locations.</p> <p>Component or Condition being Restricted: The D and E stations can only operate in a chopped pink beam or chopped white beam mode.</p> <p>Resolution Required: Type C surveys will need to be performed on all listed new welds when continuous white beam is transported into the D and E stations.</p> <p>Issued by: Dean Wyncott Date on 08/08/2015 Reviewed by: Dean Wyncott on 03/02/2020</p>	None

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12.	RSS component survey and alignment worksheets	DCS-CAT was last surveyed during the Dec 2018/Jan 2019 shutdown.	None
13.	RSS interface Document	Sector 35: ICMS Content ID APS_1661974	None
14.	PSS user requirements specification	Sector 35: ICMS Content ID APS_1153181	None
15.	Sector floor plan, including egress aisles and work areas	Document number D10402-100000 Floor Plan (located in Box, BSDRSC Reviews, 35-ID, DCS FDR, Section 04_FloorPlan) https://anl.app.box.com/folder/7467880441	Pedergrnana upload to ICMS
16.	Beamline layouts showing major radiation safety shielding components	00-0-D141-110000 Layout (located in Box, BSDRSC Reviews, 35-ID, DCS FDR, Section 06_BeamlineLayout) https://anl.app.box.com/file/61273208633	Pedergrnana upload to ICMS
17.	Synchrotron and Bremsstrahlung ray trace drawings for all operating modes	DCS Phase IIIa Configuration folio in ICMS. ICMS Content ID APS_1413734	None
18.	Design drawings of RSS components that show functionality, shielding and aperture dimensions, and shielding material	See Beamline Component Reference Table ICMS Content ID APS_1438082 for Phase IIIa Configuration components	None

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19.	Thermal analysis for RSS components connected to PSS water flow	Mask 1: ICMS Content ID APS_1436178 WB Stop: ICMS Content ID APS_1436516 Photon Shutter: ICMS Content ID APS_1436518 Mask 3: ICMS Content ID APS_1436189 Mask 2: ICMS Content ID APS_1436189 WBS End Station B: ICMS Content ID APS_1437593 PB Stop B: ICMS Content IDs APS_1437564 and APS_1437806 Mask 5: ICMS Content ID APS_1437621 Mask 4: ICMS Content ID APS_1437558 WBS End Station C: ICMS Content ID APS_1437593 PB Stop C: ICMS Content IDs APS_1437564 and APS_1437806 WBS End Station D: ICMS Content ID APS_1437593 PB Stop D: ICMS Content IDs APS_1437564 and APS_1437806 WBS End Station E: ICMS Content ID APS_1437593 PB Stop E: ICMS Content ID APS_1437564 and APS_1437806	None
20.	Assembly drawings for x-ray shielded enclosures	All located in Box, BSDRSC Reviews, 35-ID DCS-CAT 35-ID-A: 3105040302-300000-00 35-ID-B: 35-ID-B-100 Rev B https://anl.app.box.com/folder/7467870921 35-ID-C: 35-ID-C-100 Rev C https://anl.app.box.com/folder/7467871853 35-ID-D: 35-ID-D-100 Rev C https://anl.app.box.com/folder/7467873765 35-ID-E: 35-ID-E-100 Rev C (ICMS Content ID APS_1437709)	Pedergrana to create enclosure drawing folio and upload to ICMS
21.	Date of last Health Physics routine survey	The last HP routine survey of 35-ID was conducted in July 2020. No mitigation was required.	None

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22.	ES&H coordinator provides recent ES&H inspection reports and identifies open safety issues, if any.	The last safety walk through for Sector 35 was completed on 11/30/2020. All issues have been closed out.	None
23.	Committee and beamline personnel discuss opportunities for improving the process	None	None

Section 2: Safety walk through was not held on the day of the review. Review held virtually due to the Lab operating in Limited Operations.
ICMS Workflow Approvals Required

Nena Moonier (Assessment Team Leader)
 Paul Rossi (Assessment Team Member)
 Mike Fries (Assessment Team Member)
 Patti Pedergrana (Assessment Team Member)
 Elizabeth Schmidt (Assessment Team Member)
 John Connolly (Responsible Manager)

File / Distribution:

- PSC Deputy Assoc. Lab Director - Operations (Approver)
- CAT or XSD Division Director
- Sector Personnel and Safety Coordinator
- User Safety Officer
- PSC ESH/QA Representative
- User Experiment Oversight
- APS User Technical Interface
- AES-EFO Group

Supporting Documents:

DCS-CAT Sector 35 Three-Year Sector Safety Review Notification Letter (APS_2176304)
 DCS-CAT Sector 35 Three-Year Sector Safety Review Agenda (APS_2176305)
 DCS-CAT Sector 35 Three-Year Sector Safety Review Meeting Minutes (APS_2176306)
 DCS-CAT Sector 35 Three-Year Sector Safety Review Presentation (APS_2176307)